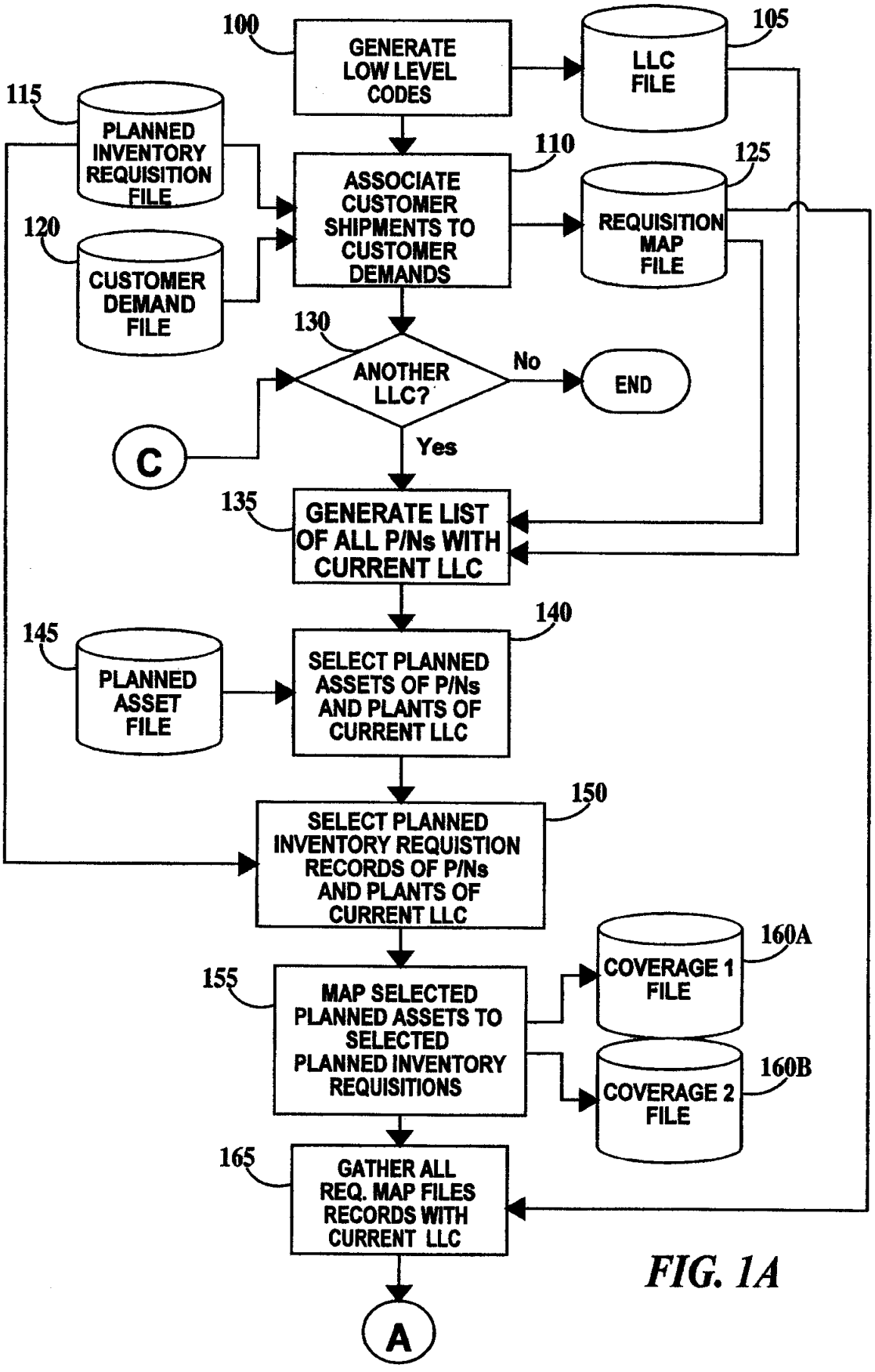
100
GENERATE LOW LEVEL CODES
105
LLC FILE
115
PLANNED INVENTORY REQUISITION FILE
110
ASSOCIATE CUSTOMER SHIPMENTS TO CUSTOMER DEMANDS
125
REQUISITION MAP FILE
120
CUSTOMER DEMAND FILE
130
ANOTHER LLC?
No
END
C
Yes
135
GENERATE LIST OF ALL P/Ns WITH CURRENT LLC
140
145
PLANNED ASSET FILE
SELECT PLANNED ASSETS OF P/Ns AND PLANTS OF CURRENT LLC
150
SELECT PLANNED INVENTORY REQUISTION RECORDS OF P/Ns AND PLANTS OF CURRENT LLC
160A
COVERAGE 1 FILE
155
MAP SELECTED PLANNED ASSETS TO SELECTED PLANNED INVENTORY REQUISITIONS
160B
COVERAGE 2 FILE
165
GATHER ALL REQ. MAP FILES RECORDS WITH CURRENT LLC
A

FIG. 1A

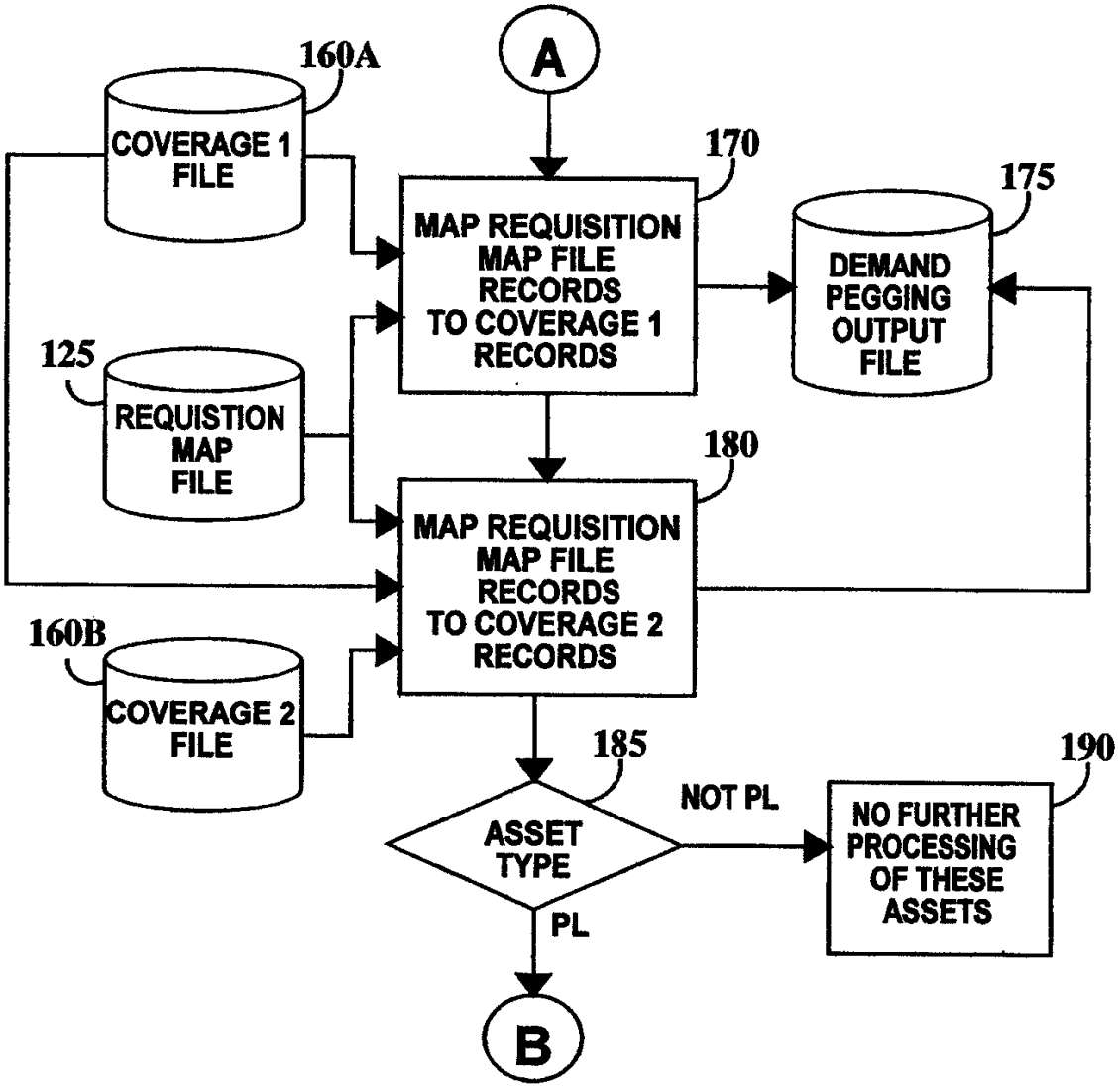
A
160A
COVERAGE 1 FILE
170
MAP REQUISITION MAP FILE RECORDS TO COVERAGE 1 RECORDS
175
DEMAND PEGGING OUTPUT FILE
125
REQUISTION MAP FILE
180
MAP REQUISITION MAP FILE RECORDS TO COVERAGE 2 RECORDS
160B
COVERAGE 2 FILE
185
ASSET TYPE
NOT PL
190
NO FURTHER PROCESSING OF THESE ASSETS
PL
B

FIG. 1B

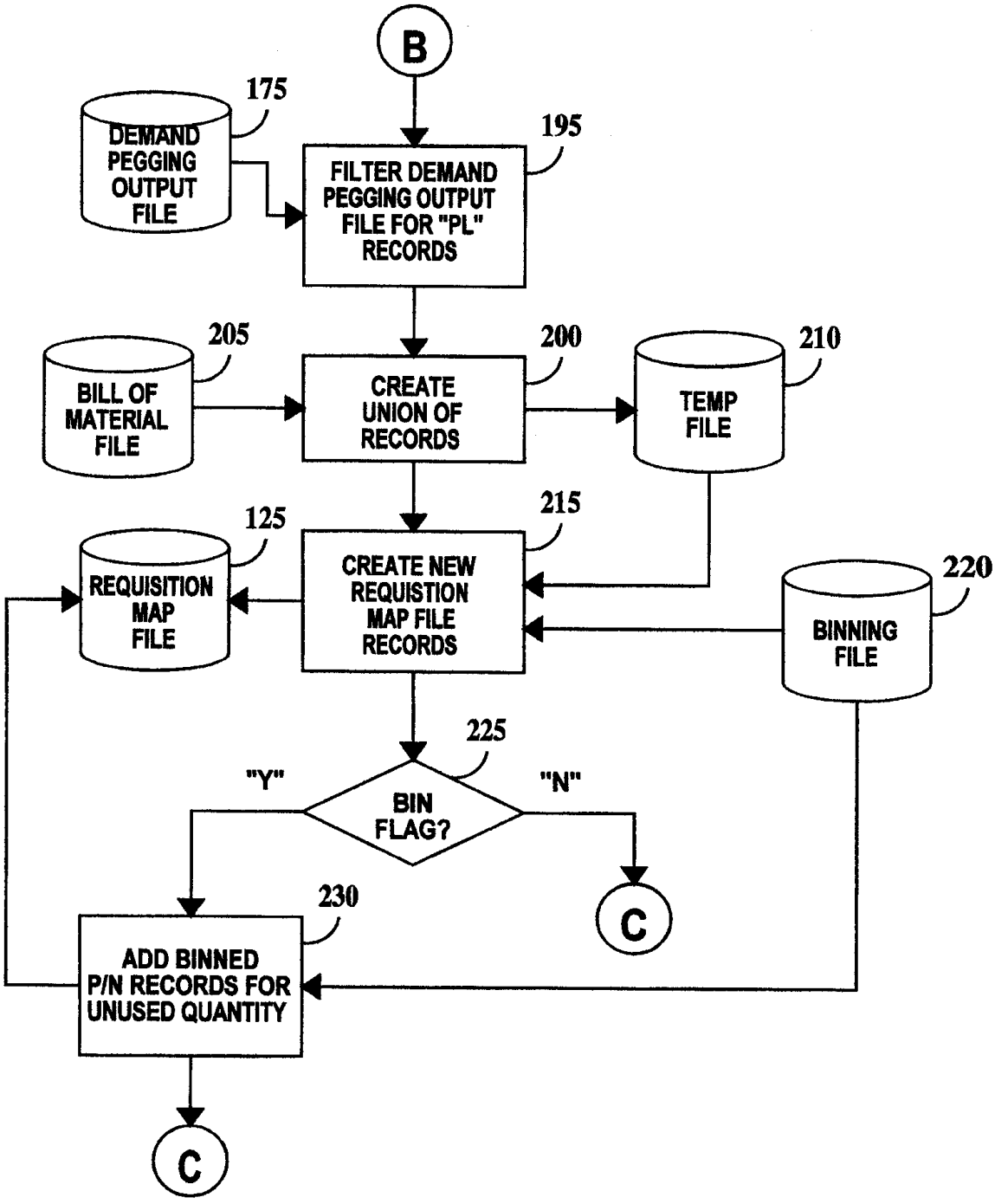
B
175
DEMAND PEGGING OUTPUT FILE
195
FILTER DEMAND PEGGING OUTPUT FILE FOR "PL" RECORDS
205
BILL OF MATERIAL FILE
200
CREATE UNION OF RECORDS
210
TEMP FILE
125
REQUISITION MAP FILE
215
CREATE NEW REQUISTION MAP FILE RECORDS
220
BINNING FILE
225
"Y"
BIN FLAG?
"N"
230
ADD BINNED P/N RECORDS FOR UNUSED QUANTITY
C
C

FIG. 1C

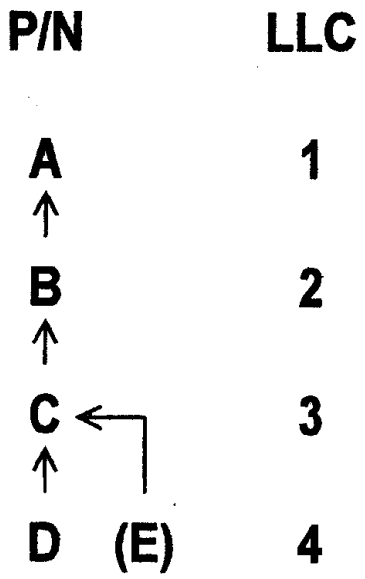

FIG. 2A

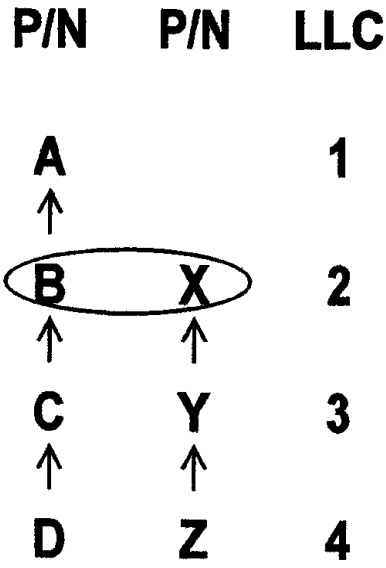

FIG. 2B

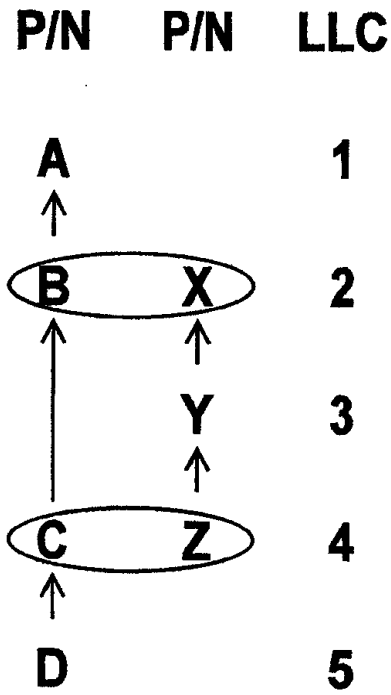

FIG. 2C

EXAMPLE PLANNED INVENTORY REQUISITION FILE							
Part Number	Plant	Requisition Type	Requisition Identifier	Planned Asset Reference	Quantity	Date	Customer Code
PN1	PL1	CSHP	500		100	2/10/2004	X
PN1	PL1	SUB	5	PN2	200	2/20/2004	
PN1	PL1	CSHP	503		300	2/28/2004	X
PN2	PL1	CSHP	502		200	2/20/2004	X
PN3	PL1	CSHP	600		100	3/2/2004	Y
PN6	PL1	CSHP	601		50	3/5/2004	Y
PN7	PL1	CSHP	602		30	3/8/2004	Y
PN4	PL1	COMP	6	PN3	240	2/26/2004	
PN5	PL1	COMP	6	PN3	120	2/26/2004	
PN8	PL1	COMP	7	PN6	50	3/1/2004	
PN8	PL1	COMP	7	PN7	30	3/1/2004	

FIG. 3A

EXAMPLE CUSTOMER DEMAND FILE					
Part Number	Customer Code	Demand Type	Request Quantity	Request Date	Order Number
PN1	X	Order	50	2/5/2004	2000
PN1	X	Order	50	2/10/2004	2001
PN1	X	Order	300	2/28/2004	2003
PN2	X	Order	200	2/20/2004	2002
PN3	Y	Order	100	3/2/2004	3002
PN6	Y	Order	50	3/5/2004	3003
PN7	Y	Order	30	3/8/2004	3004

FIG. 3B

EXAMPLE REQUISITION MAP FILE (AFTER STEP 110)										
Part Number	Plant	Requisition Type	Requisition Identifier	Reference	Requisition Date	Consumption Quantity	Customer P/N	Customer Code	Order Number	Customer Demand Quantity
PN1	PL1	CSHP	500		2/10/2004	50	PN1	X	2000	50
PN1	PL1	CSHP	500		2/10/2004	50	PN1	X	2001	50
PN1	PL1	CSHP	503		2/28/2004	300	PN1	X	2003	300
PN2	PL1	CSHP	502		2/20/2004	200	PN2	X	2002	200
PN3	PL1	CSHP	600		3/2/2004	100	PN3	Y	3002	100
PN6	PL1	CSHP	601		3/5/2004	50	PN6	Y	3003	50
PN7	PL1	CSHP	602		3/8/2004	30	PN7	Y	3004	30

FIG. 3C

EXAMPLE PLANNED ASSET FILE								
Part Number	PLANT	Asset Type	Asset Identifier	Planned Requisition Reference	Projected Quantity	Projected Date	Start Quantity	Start Date
PN1	PL1	WIP	1		100	2/10/2004		
PN1	PL1	WIP	2		50	2/18/2004		
PN1	PL1	WIP	3		150	2/20/2004		
PN1	PL1	WIP	4		300	2/28/2004		
PN2	PL1	SUB	5	PN1	200	2/20/2004		
PN3	PL1	PL	6		100	3/2/2004	120	2/26/2004
PN6	PL1	PL	7		50	3/5/2004	50	3/1/2004
PN7	PL1	PL	7		30	3/5/2004	30	3/1/2004

FIG. 3D

EXAMPLE COVERAGE 1 and COVERAGE 2 FILE												
Part Number	Plant	Asset Type	Asset Identifier	Requisition Type	Planned Inventory Reference	Requisition Identifier	Quantity	Asset Availabilty Date	Requisition Date	Start Quantity	Start Date	Coverage File
PN1	PL1	WIP	1	CSHP		500	100	2/10/2004	2/10/2004			1
PN1	PL1	WIP	2	SUB	PN2	5	50	2/18/2004	2/20/2004			2
PN1	PL1	WIP	3	SUB	PN2	5	150	2/20/2004	2/20/2004			2
PN1	PL1	WIP	4	CSHP		503	300	2/28/2004	2/28/2004			1
PN2	PL1	SUB	5	CSHP	PN1	502	200	2/20/2004	2/20/2004			1
PN3	PL1	PL	6	CSHP		600	100	3/2/2004	3/2/2004	120	2/26/2004	1
PN6	PL1	PL	7	CSHP		601	50	3/5/2004	3/5/2004	50	3/1/2004	1
PN7	PL1	PL	7	CSHP		602	30	3/5/2004	3/8/2004	30	3/1/2004	1

FIG. 3E

EXAMPLE DEMAND PEGGING OUTPUT FILE														
Part Number	Plant	Asset Type	Asset Identifier	Requisition Type	Asset Availability Date	Start Date	Start Quantity	Reference	Requisition Identifier	Quantity	Customer P/N	Customer Code	Order Number	Customer Demand Quanity
PN1	PL1	WIP	1	CSHP	2/10/2004	N/A	N/A		500	50	PN1	X	2000	50
PN1	PL1	WIP	1	CSHP	2/10/2004	N/A	N/A		500	50	PN1	X	2001	50
PN1	PL1	WIP	4	CSHP	2/28/2004	N/A	N/A		503	300	PN1	X	2003	300
PN1	PL1	WIP	2	SUB	2/18/2004	N/A	N/A	PN2	5	50	PN2	X	2002	50
PN1	PL1	WIP	3	SUB	2/20/2004	N/A	N/A	PN2	5	150	PN2	X	2002	150
PN2	PL1	SUB	5	CSHP	2/20/2004	N/A	N/A	PN1	502	200	PN2	X	2002	200
PN3	PL1	PL	6	CSHP	3/2/2004	2/26/2004	120		600	100	PN3	Y	3002	100
PN6	PL1	PL	7	CSHP	3/5/2004	3/1/2004	50		601	50	PN6	Y	3003	50
PN7	PL1	PL	7	CSHP	3/5/2004	3/1/2004	30		602	30	PN7	Y	3004	30

FIG. 3F

EXAMPLE BILL OF MATERIALS FILE					
Part Number	Plant	Process	Component P/N	BOM Quantity	BIN Flag
PN3	PL1	PR1	PN4	2	N
PN3	PL1	PR1	PN5	1	N
PN6	PL1	PR1	PN8	1	Y
PN7	PL1	PR1	PN8	1	Y

FIG. 3G

EXAMPLE BINNING FILE				
Part Number	Plant	Process	BINNED P/N	BINNING PERCENTAGE
PN8	PL1	PR1	PN6	70
PN8	PL1	PR1	PN7	30

FIG. 3H

EXAMPLE TEMP FILE

Part Number	Plant	Asset Type	Asset Identifier	Requisition Type	Asset Availability Date	Start Date	Start Quantity	Reference	Requisition Identifier	Quantity	Customer P/N	Customer Code	Order Number
PN3	PL1	PL	6	CSHP	3/2/2004	2/26/2004	120		600	100	PN3	Y	3002
PN3	PL1	PL	6	CSHP	3/2/2004	2/26/2004	120		600	100	PN3	Y	3002
PN6	PL1	PL	7	CSHP	3/5/2004	3/1/2004	50		601	50	PN6	Y	3003
PN7	PL1	PL	7	CSHP	3/5/2004	3/1/2004	30		602	30	PN7	Y	3004

Customer Demand Quantity	Component P/N	BOM Quantity	BIN FLAG
100	PN4	2	N
100	PN5	1	N
50	PN8	1	Y
30	PN8	1	Y

FIG. 3I

EXAMPLE REQUISITION MAP FILE (AFTER STEP 215)										
Part Number	Plant	Requisition Type	Requisition Identifier	Reference	Requisition Date	Consumption Quantity	Customer P/N	Customer Code	Order Number	Customer Demand Quantity
PN1	PL1	CSHP	500		2/10/2004	50	PN1	X	2000	50
PN1	PL1	CSHP	500		2/10/2004	50	PN1	X	2001	50
PN1	PL1	CSHP	503		2/28/2004	300	PN1	X	2003	300
PN2	PL1	CSHP	502		2/20/2004	200	PN2	X	2002	200
PN3	PL1	CSHP	600		3/2/2004	100	PN3	Y	3002	100
PN6	PL1	CSHP	601		3/5/2004	50	PN6	Y	3003	50
PN7	PL1	CSHP	602		3/8/2004	30	PN7	Y	3004	30
PN4	PL1	COMP	6	PN3	2/26/2004	240	PN3	Y	3002	100
PN5	PL1	COMP	6	PN3	2/26/2004	120	PN3	Y	3002	100
PN8	PL1	COMP	7	PN6	3/1/2004	50	PN6	Y	3003	50
PN8	PL1	COMP	7	PN7	3/1/2004	30	PN7	Y	3004	30

FIG. 3J

EXAMPLE REQUISITION MAP FILE (AFTER STEP 230)										
Part Number	Plant	Requisition Type	Requisition Identifier	Reference	Requisition Date	Consumption Quantity	Customer P/N	Customer Code	Order Number	Customer Demand Quantity
PN1	PL1	CSHP	500		2/10/2004	50	PN1	X	2000	50
PN1	PL1	CSHP	500		2/20/2004	50	PN1	X	2001	50
PN1	PL1	CSHP	503		2/28/2004	300	PN1	X	2003	300
PN2	PL1	CSHP	502		2/20/2004	200	PN2	X	2002	200
PN3	PL1	CSHP	600		3/2/2004	100	PN3	Y	3002	100
PN6	PL1	CSHP	601		3/5/2004	50	PN6	Y	3003	50
PN7	PL1	CSHP	602		3/8/2004	30	PN7	Y	3004	30
PN4	PL1	COMP	6	PN3	2/26/2004	240	PN3	Y	3002	100
PN5	PL1	COMP	6	PN3	2/26/2004	120	PN3	Y	3002	100
PN8	PL1	COMP	7	PN6	3/1/2004	50	PN6	Y	3003	50
PN8	PL1	COMP	7	PN7	3/1/2004	30	PN7	Y	3004	30
PN8	PL1	COMP	7	PN6	3/1/2004	20	PN6	UNUSED	3003	50

FIG. 3K

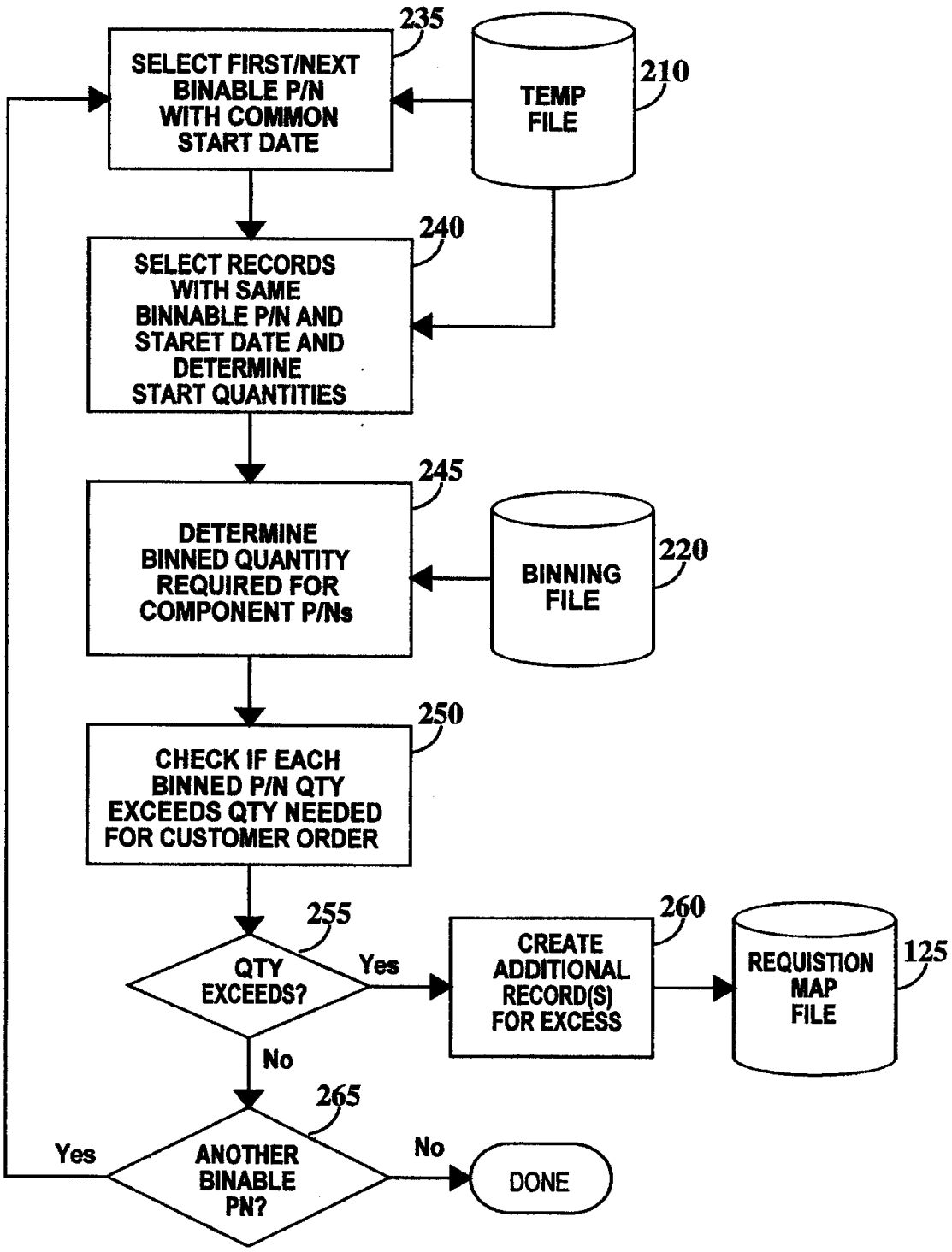
235
SELECT FIRST/NEXT BINABLE P/N WITH COMMON START DATE
TEMP FILE
210
240
SELECT RECORDS WITH SAME BINNABLE P/N AND STARET DATE AND DETERMINE START QUANTITIES
245
DETERMINE BINNED QUANTITY REQUIRED FOR COMPONENT P/Ns
BINNING FILE
220
250
CHECK IF EACH BINNED P/N QTY EXCEEDS QTY NEEDED FOR CUSTOMER ORDER
255
QTY EXCEEDS?
Yes
260
CREATE ADDITIONAL RECORD(S) FOR EXCESS
REQUISTION MAP FILE
125
No
265
ANOTHER BINABLE PN?
Yes
No
DONE

FIG. 4

EXAMPLE OF DEMAND PEGGING WITH BINNING INPUT
PN1 IS PRODUCT WHICH IS BINABLE 70% BECOMES BINNED PN2 30% BECOMES BINNED PN3
CUSTOMER ORDERS: CUSTOMER ORDER 1, PN2 QUANTITY 50 CUSTOMER ORDER 2, PN3 QUANTITY 30
PRODUCTION SCHEDULE RUN WIP LOT 1, COMPONENT DEMAND PN 1 QUANITY 100
DEMAND PEGGING RESULT WIP LOT1 - CUSTOMER ORDER 1, QUANTITY 50 WIP LOT1 - CUSTOMER ORDER 2, QUANTITY 30 WIP LOT1 - UNUSED, QUANTITY 20

FIG. 5A

EXAMPLE OF DEMAND PEGGING WITH BINNING
STEP 1 = ASSIGN ASSETS A - ASSIGN 50 PIECES TO COMPONENT DEMAND 1 SHIPMENT OF PN2 TO CUSTOMER ORDER 1 B - ASSIGN 30 PIECES TO COMPONENT DEMAND 1 SHIPMENT OF PN3 TO CUSTOMER ORDER 2
STEP 2 - CALCULATE ASSET DISTRIBUTION A -100 PN1 COMPONENT DEMAND 1 X 70% = 70 PIECES TO PN2 SINCE ONLY 50 WAS ASSIGNED IN STEP 1, ASSIGN REMAINING 20 TO "UNUSED", AND CREATE NEW RECORD B -100 PN2 COMPONENT DEMAND 1 X 30% = 30 PIECES TO PN3 SINCE THIS AMOUNT WAS ASSIGNED IN STEP 1, NO FURTHER ACTION NEEDED

FIG. 5B

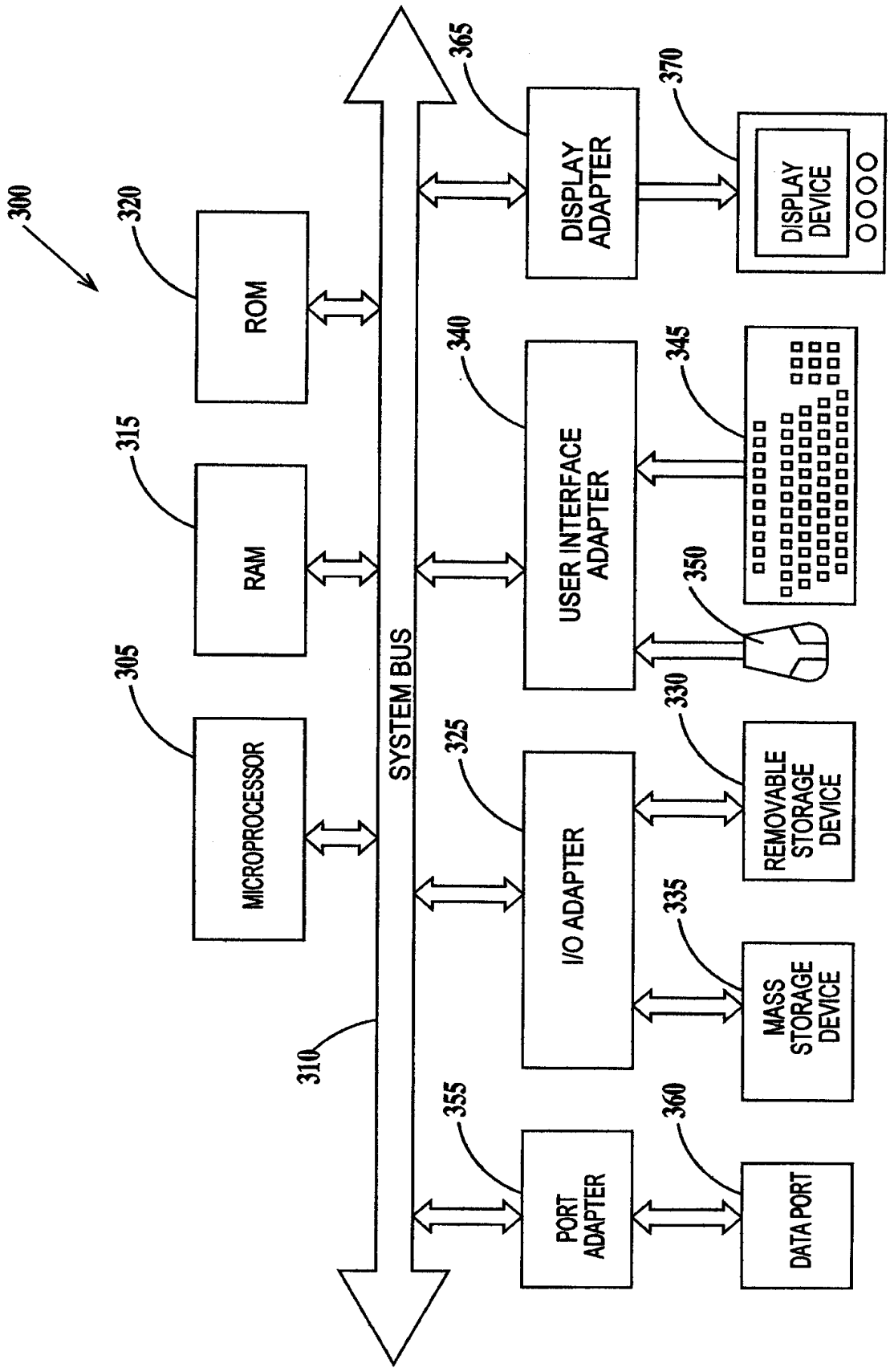
300
320
ROM
315
RAM
305
MICROPROCESSOR
SYSTEM BUS
310
365
DISPLAY ADAPTER
370
DISPLAY DEVICE
340
USER INTERFACE ADAPTER
345
350
325
I/O ADAPTER
330
REMOVABLE STORAGE DEVICE
335
MASS STORAGE DEVICE
355
PORT ADAPTER
360
DATA PORT

FIG. 6